

103

1954-8-50-51

File No. 95-51/36

B CLASS

P.W.

DEPARTMENT

C

BRANCH

Subject:— Bridges
Malaprabha River at
Khanapur
Dist. Belgaum.
Marmagao-Belgaum
Poona Road.

B [K] - 1951

I

C.

File No. 9551/36
Std. Spec. Slip. 21 A

DOCKET SHEET (B)

Subject:—

File No. 9551/36

Public Works DEPT.

C BRANCH. (d)

References:—

Notes Section

Date.	To whom sent.	Notes and instructions.
15-10-22	2B	Amk (ca)
16-3-23	2B	Amk (1-5-23)
13-5-23	2B	Amk
22/7/23	2B	Amk
30/7	C B (1)	

P.W.D.C.B.(1)

The work of constructing a bridge over the Malaprabha River at Khanapur on the Marmagao-Belgaum-Poona Road has been included in the P.W.Road Programme for the year 1948-49.

2. In his letter under disposal, the S.E., S.C. states, for the reasons given, that the alignment of the road suggested by the Ex.Engr.. late Road Projects Dn. (South), should be adopted and the bridge constructed at the old site proposed by him, in preference to the alignment suggested by the late S.E., P.C. It is for consideration whether the S.E., S.C.'s proposal may be approved, or the papers may be referred u.o. to the Ex.Engr Designs Dn., for remarks through the S.E., B.C.

Y.S.
19-6-48

Thro.D.E.(R)

3. The alignment suggested by the E.E. late Rd Projects Dn (South) is preferable for the reasons stated by the S.E. in his letter. However it would be better if it is shifted some 50' d/s, as in that case Mr. Dangle's bldg which is at a distance of 55' only from the centre line will be outside the required marginal distance of 99.5 ft, the road being a Provincial Highway and it will enable to propose a curve of required radius on the Belgaum Side. From the contours on the blue print plan No 1/2 it appears horrible to shift the alignment 50' d/s. The pps may, however, be referred up to the

Ex Engr (Designs), for remarks Thro the S.E., B.C.

(Rm) Y.S.
24/6/48

For the reasons given by the S.E.S.C., I wd recommend that the site previously selected by the E.E. Road Projects Bd (South) shd be finally approved. It has got exposed rock in bed and therefore the cost of foundations will be much less. For the sake of merely having better radius than 800' it is undesirable to go in for a costlier constn. S.E.S.C., E.E. Designs & S.E.B.C. may be informed accordingly. The work is included in the programme of 48-49 and so the p.c. shd be credited.

(Ry)
23/6/48

Scy (R.B.)

24/6

24/6/48

CB(1)

Reimbursed with the requisite draft for approval.

Ths. DE(R)

Yd 24/6

(11 Sec. dep. p. 3 of Const. Section)

DS (R.H.)

Sec. 3 of Const. Section

C.B.(1)

In connection with the site of the proposed bridge over the Malaprabha River at Khanapur, the S.E.,S.C.,had forwarded a copy of his letter No.B.M.19,dated the 12th June 1948, to the Ex.Engr., Designs Dn.,for information. In his endt.No.13/48/1752, dated the 18th June 1948, the Ex.Engr.,Designs Dn.,has offered remarks on the S.E.S.C.'s proposal and for the reasons given by him, he has stressed that alignment No.II which gives right angled crossing with bigger curves of 1600 ft.radius may be finally approved by Govt. The S.E.,B.C.,forwards the corres.to Govt.and remarks that he agrees with the view expressed by the Ex.Engr.in para.4 of his endt. The S.E.favours the downstream site for the bridge as it enables approaches of correct geometrical standards to be provided.

2. In this connection, attention is invited to the D.S.(R.& B.)'s note dated the 23-6-48,approved by Secy.(R.& B.), and draft letter to the S.E.,S.C. Orders are requested whether the draft as approved may issue.

Thro.C.B.(II) & D.E.(R)

Bdg
26-6-48 *25*
25-6-48
26/6

The alignment N^o.1 was approved in the previous notes because S.E.S.C. reported that the foundation cost will be less. However, E.E. designs on reports a S.E.B.C. agrees, that the foundation cost for ^{both} the sites will be the same. ✓ If this is so, alignment N^o.2 which *DS(R)* gives a right angled crossing and better radii of curvature will be preferable. The draft at p-3 of C.S. shd not issue but a fresh one approving site N^o.2 may issue informing S.E.S.C., S.E.B.C. & E.E. Designs. *22/6* *23/6*

9551/31
33467

P.W.D.

C.B.(1)

Remitted with a draft for approval.
This, CB(II) & DE(R)

* P 17
Bdg 30-6-48

72
30-6-48

207
1/7/48

BM
1/7/48

207

5

9551/26

56800

O.W.D.

CS

C-B(1)

x

The S.E. S.C. was expedited for the P+E. for the bridge over the Malafreche River at Champen. 2 reply. he states that the necessary data reqd. for design purposes is still awaited for the Ex. Eyr., Belgium Sh., who is being expedited. Receipt of the P+E. may be awaited for the S.E.

21
18-10-68

12
18/10/68:

15

✓
JAS

B.W.D.CR(1)

Please see the ~~SE~~, BE's letter ^{p. 33 (45)}
 dated the 8.2.50 forwarding a
 preliminary ^x design note for the
 work of constructing a bridge over
 the Malpeabha river at Khanpur
 on the Mangalore to Belgaum - Poona R.
 B.H. - now proposed as a part of
 the West Coast Road - N.H. As the G.O.D.
 has agreed to share half the cost
 of the development of the road, the
 design note may be forwarded ^{with our recommendations} to
 the Com. Engrs. (Roads) for approval.
 Necessary draft will be put on
 return of the papers.

6
22/1/51

Mr. BE (R&B) - 2

Sl. No.
 x Slip A₁ - 1/5
 DS (R&B)

CE

x - Slip B₁ - p. 5
 para III

2/ Site:- In all three sites have been
 investigated vide plan no. 1 in plans for
 site No. III. In G.L. @ p. 17 ante c/s, Govt.
 had approved site No. II. The present S.E. & C.
 Lower suggested subsequently site No. III which
 lies between sites I & II. It is reported that
 site No. III has the advantages of both

the alignments Nos I & II. The site No III has been inspected by the S. E. B.C., E.E. Designers & E.E. Belf. En and is considered suitable by them. From the contour plan No. I above referred to, it is seen that site No. III crosses the river fairly at right angle. In view of ^{para 3 & 4} p. 33 & 34 of the general description and ^{para 6} of the S.E. B.C. letter, site No III ^{now} may be approved.

X sup B - No 5-7

yes

(ii) Foundations :— Bores have been taken along the site No. II and it is presumed that the foundation strata as met with at site no. II will also hold good at site No. III being near to site No. II. For preliminary report this may be allowed but before preparing detailed p's & c's, bores may be taken along site No. III. The bore results ^{vide plan No. 9 in the plans for site no. II} show that rock dips from right bank to left bank. The rock is actually on the right bank and it is met with at 52' below the bed on the left bank. It is proposed to go in for open foundations on the right ~~side~~ side where rock is exposed and for well foundations in the left bank where rock is met with at a greater depth, vide para V of the general description. The foundations as proposed may be approved.

X do - p. 7 (para 13)

O sup C - plan No. 19 p. 17

O sup B - p. 7

yes

(iii). Hydraulic calculation :— For the reasons stated in para ^XVI of the general description, the discharge as per Inglis' formula has been calculated in 2 parts and it works out to 1,38,500 cusecs ^{for c.a. of 215 sq. miles} vide calculations. From the observed H.F.L. ^{at 2129.00} and other data the discharge works out to only ^{about} 70,000 cusecs. This, it is stated, is ~~probably~~ probably due to incorrect value of the hydraulic gradient. The E. E. designs on has requested the E. E. Belgium on to observe the same during the coming monsoon vide calculations and para ^XVI of the general description. These observations will take time. The calculation for discharge as per Channel formula will $\therefore$ be modified after knowing the hydraulic gradient. Meanwhile it is proposed ^{that} if a high level bridge is to be provided at the Sate, the same waterway as the Ry bridge half a mile ups of the proposed bridge, standing for many years without giving trouble ^{has} got, would be adequate. On this basis only a proposal for a bridge has been designed and the cost thereof worked out. As the H.F.L. has been ^{max.} correctly observed, there appears no objection to this proposal. In the case of a causeway, increase in discharge

X slt B₁-P.9

X do-: 1.27

O do-p-9

O do-p.21
X do-H.9-11

yes

⊕ do-p.11

It may be needlessly large even. We want to know the minimum waterway required

will increase affluence and consequently duration of interruptions to traffic.

iv) Waterway etc. - (a) In the case of a ry. bridge half a mile u/s of the proposed bridge, the linear waterway ^{width} is about 338'-6" and the waterway area provided below H.F.L. is about 8930 sqft. In the design, it is proposed ^{under consideration} to provide a linear waterway of 300' and waterway area of 7875 sqft for a discharge of 70,000 cusecs vide para vii of an general description. The waterway provided will be, it appears, inadequate for ^{being} the discharge as per Inglis' formula. As the discharge as per Inglis' formula will be rare, it is for consideration whether the waterway as proposed for a full bridge may be accepted if it is decided to have a full bridge at the site.

+ Sup. B, p. 49

L-DO-p. 13

This may be decided after the correct hydraulic gradient has been determined but in any case it need not be greater than that of the Ry. bridge

(ii) Clearance :- It is proposed to provide a clearance of 8'-50 between the assumed affluence H.F.L. R.L. ^{2130.00} ~~2130.00~~ and the bottom of the girder in the centre of the span. vide plan no. 4/5. As per clause 105 of the I.R.C. ¹ std specifications and code of practice for the design of Rd bridge sect. I (1948), for openings of high level bridges which are approximately rectangular or with a very flat curve etc. and for discharge over 1,00,000 cusecs, the min. clearance is specified as 5'-0". This clearance is to be measured from the lowest point of the deck structure inclusive

① Ship A,

② will be put up if reqd

9551/36/10111

P.W.D.

of main girders along the central half of the clear opening. The lowest point of the main girder in the design under consideration is at R.L. 2134.00 (i.e. $2136.50 - 2.50$ ^{R.L. of the centre of the bottom of the girder} extra thickness of the girder near pier) vide plan no. 4/5. In that case the clearance works out to only 4.00. It may be increased to 5.00 as per I.R.C. specifications above referred to.

(iii) For a high level bridge it is proposed to provide R.C.C. balanced cantilever bridge, vide plan no. 4/5. The bridge has been designed for 2 lanes of I.R.C. class A loading and 1 lane of Class AA loading. Calculations for decking, girders etc have not been attached to the preliminary report.

α Slip B₁ - Mo. 13-14

(b) For the reasons stated in para ^{α.} VIII of the general description, the E.E. designs recommends construction of a causeway at the site. The S.E. B.C. also agrees to the proposal and recommends it for approval vide para 6 of the S.E.'s letter. ^{p. 33 c/s.}

× Slip A₁ - plan 5/5-

② Slip C₁ - plan no. 10
p. 19

~~The~~ It is proposed to keep the bottom of the R.C.C. decking in the case of the causeway at R.L. 2116.25 i.e. at the max. H.F.L. observed between 1921 and 1934. It is also stated that H.F.L. R.L. 2129 occurred in 1914 and since that time no such flood has ever

occurred. It may be recurring once in 50 or 100 years. The ^{top of the} roadway will be at A.L. 2119.00 i.e. about 10' below the ^{max.} H.F.L.

A.L. 2129.00 occurred in 1924. It appears that there will be ordinarily no interruption to traffic on the Causeway as proposed except in the case of abnormally high floods. The cost of the causeway as

proposed comes to Rs. 1,74,000/ while the cost for full bridge works out to Rs. ~~5,25,000~~

5,26,000/. As there will ^{be} considerable saving in ~~proposing~~ ^{constructing} a causeway and there will be ordinarily no ^{serious} interruption to traffic,

the proposal for constructing a causeway on the Malaprabha river near Khanapur may be approved. It is proposed to provide 6 spans of 40' each with R.C.C. slab decking.

V) The road on which ^{the} X-^{ing} in question lies is a P.H. and forms part of West Coast road which is to be developed as N.H. in due course. It is $\therefore$ proposed to keep the formation of the approaches of the bridge, 32' wide as per N.H. standards vide para ^① IX of the general description.

VI) The alternative rough estimates have ^① been based on 1938-39 rates plus 100% increase over them as usual. The S.E. may be asked to prepare p^sec^s on

X Slip B₁-p-81
 & slip B₁-p.

This may be agreed to.

① Slip A₁-p-75

① Slip B₁-p-17

① do- p.17 (para X)

Current schedule of rates, as has been decided recently.

vii) The estimates do not make provision for land acquisition. It should be made in detail p'scs.

H 54% A, B, 2C,

37. The preliminary report [#] subject to above remarks may be forwarded to ^{the C.E.} ~~the C.E.~~ ^{b.33 4/5} for ^{his} approval vide para 3 of the S.E.'s letter.

for
5/3/50

DS (Rms)

CE

There are two alternative proposals: one for a high level bridge and another for a submersible one, and the rough cost in each case has been stated. The waterway provided for the high-level bridge has been based on that of the Railway bridge, which is stated to be adequate. However, it may not be only adequate but it may be something more than adequate. Hence, the cost of the high-level bridge would appear to be more if this is so. Even then, the difference in cost is so much that a submersible bridge may be adopted subject to the approval of the Govt. of India.

Hydraulic Gradient:- Too much emphasis seems to have been laid on obtaining the correct value of hydraulic gradient by working inversely, i.e., calculating the hydraulic gradient on the basis of the discharge obtained by Ingle's formula. I think we should adopt whatever hydraulic gradient is found as actually measured during floods without trying to

manipulate..

manipulate it to fit in with Ingles's formula.

For a 40' span, a 2'-6" slab has been provided. It seems to me that, for such a span, it would be more economical to have a T-beam and slab design. It is true that this is a submersible bridge, but I believe that even in such cases T-beam and slab design has been used in the past and has proved satisfactory.

The estimate will require to be recast at current scheduled rates in order to have a clear idea of the financial liabilities involved. We may do this before sending the file to the Govt. of India.

WJ
22.3.50

DRN.
20.3.50

I want to know whether Govt of India has accepted this alignment of the West Coast Road. I know that there is a Shamra for Frontier Road and if instead of taking the road to Belgam via Astoli & ^{Shamra} ~~Shamra~~ if the road could have been taken - from Marmgosa via Anmode, Tinsai Phal Astoli, Nagargoli, Loshali to Almaran & then to Haligal into Karwar we might have avoided going into Belgam. Alternatively we could have gone from Loshali to Marmgosa to Shamra & then by Karwar Hubli Shamra Road upto Ankola & then along the West Coast via Mirjan Madras Frontier Road. Was Belgam selected as the point on the West Coast Road

WJ
22.3.50

WJ
22.3.50

B.W.D.CA(I)

Re-submitted with ref. to the CA's note dated the 22.3.50.

* Sup. D' below
(p 316 of
7.9598/36-Pr. 12)

⊗ Sup. A' below
(p 152.161 of
—do—Pr. 12)

⊙ Sup. B' below
(p 195 of
—do—)

* Sup. E' below
(p 207-208 of
—do—)

2. Reference is requested to para 5 of the office^x note dated the 9.9.49 on File No. 9598/36. The Planning Officer to the Govt. of India (Roads) recommended the route from Madras boundary to Yellapur via Bhatkal, Hnavaer, Kunla, Madangeri and Hebbul and from Yellapur to Belgaum via Halihal, Hnavaer, Nandgam and Khamkur. The Ministry of Transport (Roads Organisation) preferred linking Yellapur to Hubli on N.H. No. 4. This Govt., however, favoured the junction at Belgaum as the shorter route to Bombay, vide G.O. No. 9598/36-Cl. dated the 25.8.48. The G.O. have offered no[✓] further comments on this point and it may be assumed that they have accepted our recommendation. Please see in this connection par. 11 of the minutes of the meeting held^{by the H.W.D.} with Hon. Mr. Sambanam on 5.1.1949.

+ Sup. C' below
(pp 231-232 of
—do—Pr. 12)

The. DE(R)-1

12.
23.3.50

for
23/3/50

DS (A, A) :

sur
263

no
27-3-50,

16

9551/36/18244

P.W.D.

Co(2)

Resubmitted with the necessary
draft for approval.

Wm. DE(R) - 1

for 20/3

6.
34.3.50

✓
1. 9

DS (60A)

Issued Sept 24 Hs 35-40
C/s. and return on 3
8 page copy as.
PM
34-50.

9551/36/62183

P.W.D.

(G.B.I)

Drummed with refer to G.L.
p.47 (2/5)
No. 9551/36-C(I), dated 4.4.50 & the
p.15 a. it
D.N. dated 4.2.3.50 underlying it.

2. The preliminary design note for
constructing a bridge across the Mopkotta
River near Kharapuzai mile No. 17/6+7
of the Harappa - Belgam Road

was referred to the S.E., B.C., for consideration
it after compliance with the remarks
contained in the G.L. referred above. The
S.E. has returned the preliminary report
after compliance of the remarks in the
remarks indicated in the statement accompanying
it.

3. Reference is requested to para. 3 of
letter No. 1402, dated 8.2.50 from the
S.E., B.C. & the D.N. dated 2.3.50.

The proposal in para 3 of the S.E.'s letter
is in order, it may be forwarded to the
Consulting Engineer (Roads), 4.7.1, for
technical approval.

Shri D.C. CO - I

M.S.
26.8.50
25/6

Technical
Regarding remark No. 1 @ p. 41 & p. 43 of
4.1) for the reason stated in para 3 of

the S.E. letter, and against remark
No. 1, no change is made - any as
previously proposed has been made.

At the, covering design is going to

A.S.

28th 8/10.121
C.E.

placed on

agreed to ~~the~~ vide D.S.'s marginal note
@ p. 12 ante, the question of watertight under
the bridge need not perhaps be stressed.

I agree

(ii) As regards ^{technical} remark (ii), the Ex. Engr
Belg. En. has been requested to observe
flood levels during this monsoon. ^{It is} but for
states that the results will be incorporated
in the fair project vide para 3 of the ^{p. 47}
S.E.'s endorsement. This may be allowed.

(iii) Regarding remark No. iii, ^{p. 41 c/s} for the reasons
stated against this remark, the clearance is
not changed. Reference in this connection is
invited to remark II (a) (ii) @ pp. 10-11 ante.
The E.E. Design En.'s interpretation ^{of}
the clause appears to be correct. The clearance
as proposed may be allowed. The causeway design
is ^{however} going to be agreed to.

X Slip B₁ - ^{p-}121

As a submersible
bridge is proposed
when adopted,
the question of
clearance does
not arise

IV). Regarding remark No. (iv), the E.E. Design En.

Considers the design of 40' Continuous RCC slab
more feasible and economical for submersible
bridges. However it is stated that - While preparing
fair project, ^{the cost of} 40' RCC T-bee & slab design will
also be worked out. The most economical
design will be proposed vide ^{E.E.'s} remarks
against the above technical remark. This
may be allowed.

X - done b 123

I agree

V) The remark No. V has been complied
with. The cost of the causeway ^{@ current schedule rates} works out to
Rs. 3,52,000/- and that of a High level
bridge to Rs. 6,87,000/-

⊗ p. 45 c/s
& p. 115 Slip B₁

⊗ p. 45 c/s
& p. 109 Slip C₁

9551/36/62183

P.W.D.

5/ The preliminary report with our
 recommendation for adopting the canopy
 design may now be forwarded to the C.E. (Rods.)
 for his approval vide para 3 of the SE's
 letter @ p. 33 c/s.

pp.
 14/9/52

When on the remarks of the .E.E.

D.S.

Design Dir. mentions in paras 4 (iii) &
 4 (iv) of the D.E.'s note. I do not
 find the file no. is not mentioned
 nor are the slips not found

C.E.

15-9

As at H

20/9
 1879

Re. 24/9

P.T.O.

9551/76

C.B.O.* P.W.D.

Submitted with a draft-
 with C.B. with G.O. 5/2 for
 approval. pp: 49-50-45.


 16.10.50.

17th. ~~17th~~ & DER R-I

p. 19

OK

2/. Regarding S.S. (R+S)'s letter dated 15-9-50,

the file of estimates^{cl} was slipped B₁ and reference
 to this slip B₁ and pages of the file were mentioned
 in the margin against para 4 (iii) & (iv) @ D.S. (R+S)
 p. 18 ante. ~~2~~


 17.10.50

run
 18.10

for S
 H. exp. in corr. Sec
 8/12

~~13-5-1~~ / 16-2 (1)
C.B. (II)

21.

1/120

9551/36

P. 49
Pl. see letter to the Chief Consulting
Engineer to the Govt. of India dated 19-10-53,
(P. 49) to which a reply has not yet
been received. A draft is put up, requesting
the C.C.E. to expedite for approval.

23.12.53

J.A.S.

Some. The S.E. to not expedite
with up. to the S.E. to not expedite
up by Junior.

To be dealt
with as in
line
2/1/54

C.B.P.W.D.

Submitted p.p. 55/5

2. In G.L. No. 9598/36-C(II) dated the

x - f

No. 9551/36-I
p.p. 257. 8.

25.8.48 - the Bombay Govt. has stressed

the necessity of having the proposed
West Coast Road via Bhatkal Honawar
Kumta, Madanjeri, Tellapur, Haliyal and
joining N.H. No. 4 at Belgaum. To this,
no reply was recd. - from the Govt
of India. It was, therefore, assumedthat they have accepted our recomm-
endation; please see the office note
at p. 15 ante. From the reply now
recd. - from the Consulting Engr., it
appears that the above assumption may
not be correct. As it is necy. toalign the proposed West Coast Road
via the places mentioned above, theCon. Engr. may be addressed in the
matter, as per draft p.p. 55-56/5
put up for approval

Thro' D.E.(R)I

24.2.51

[Signature]

Suff. b/c dinner

D.S. (R+B)

Unless we give some new names, I doubt

it & by & no manner

Discussed

P.D. 15/3/51

9551/36
C.B.

W.D.

Resubmitted with a fresh draft pp. 55-56 9/3
for apprx. as directed p. 23

W.D.
17/3/51

Thro' D.E. (R) I

W.D.
17/3

The draft is clumsy. &
requires to be completely recast.
First we must point out that
the budget is common for the road
by Belgau Khannaym Londa-
Gou Road as well as for
Belgau Khannaym Bidi, Alarwa
Halayal - Road - & the latter forms
part of the has been recommended
by the Gov. to be included in the
Kochin West coast Thru Road
on Blatched However, Kumbha
Kudayen Yellaym Halayal Belgau
are under C.L. & it is presumed that
S 7 & have accepted on recommendation
that is also seen from the comments
in the P.W.D. had met the Hon
Shri S. on 5.1.49. In view of the
classification, the requirement that
S 7 & may recommend the decision in
view of

D.S. (R+B)

unfortunate that
the far
remains to
be finished
out

C.B.

OSD
21/4/51

Resubmitted with a revised draft for app
Thro' D.E. (R) - I

W.D.
21/4

W.D.
2/5/51

OS (R+B)

P.W.D.Cbr.

Resubmitted.

2 As no reply has been recd. so far from the ^{Consulting Engr. to the} Govt. of India, w.r. to G.L. on p. 57 of c/s, the necessary draft ^{p. 59 of c/s} put up may issue, if appt.

3. This Dept. file no. 9598/36 reg. West Coast Road is ~~also~~ not forthcoming. It appears that these files must have been wrongly sent to the G.O. as accmpts. to G.L. no. ^{p. 57 of c/s} 9551/36-C, dated the 13-4-51. An enquiry may be made with ~~them~~ ^{p. 59 of c/s} as per para 2 of the draft put up.

B.D.
30/5/51

U.S.

C.K.

Y.P.
30/5

P.T.P.

26

In recent discussions the C.E. (Rd.)
 indicated that they would
 approve the Nat. Coast road
 to join N.H. 20 at Huber
 & not at Belgian. so we
 may take it now that
 the approval bridge is an
 liability and proceed accordingly.

However the Dept may
 go to get the official
 reply

— 2
 3/15/61

if see c/s - p. 62

9551/36P.W.D.C. B.

P.61 els

Pl. see G.L.No.9551/36-C dated the 1.6.1951.

Since no reply has yet been received from the
Consulting Engineer to the G.C.I.(Roads), he may,
if appd, be expedited by letter, as per draft put
up for appl.

9.10.51.

*adm: lower. You can't send him
expert. Com. En. to see also
9/11/51 only want what
file are with him.*

J.A.S. *adm.*
Green, Sri.
the Billai to note pl.

3-11-51
* Nowd, Sri.
6.11.51.

26
P.W.D.

C. B.

Resubmitted.

2. No reply has yet been received from the Govt.
of India to this G.Ls.No.9551/36-C dated the 13.4.1951,
1.6.1951 & 10.10.1951. That Government may, if appd,
be expedited by Telegram, as per draft put up for appl.

26.10.51

5/11/51

J.A.S.

P.W.D.C. B.

P.69 e/s

is placed below
a, E.P. to the
linked case.

In response to Govt. Telegram dated the 27.10.1951, the Government of India has now forwarded this department File No. 9598/36 (Parts I & II), which were inadvertently posted to that Govt with G.L.No. 9551/36-C dated the 13.4.1951. Although that Govt was expedited twice in the matter, nothing could be heard earlier, in this behalf.

2. In G.L.No. 9551/36-C dated 13.4.1951, a preliminary design note and plans and estimates for the bridge over the Malaprabha river, the constn. of which is necy for the development of the proposed west Coast National Highway, were forwarded to the G.O.I. for technical appl. Although about seven months have elapsed since the transmission of these documents to that Government, nothing has been heard in this connection. However, in the second para of the G.O.I. letter dated 5.11.1951, that Govt assures that the matter is receiving consideration, and a reply is expected to be sent very shortly. This may now be awaited.


9.11.51.

Thrc: D.E.(R)-I

spd
a/c

D. S.

6
9.11.51

By 27.11.51
Wm

P. W. D.C. B.

The Gen. ~~Engineer to the G.C.I.~~ may be
 reminded, w.r. t. the ~~G.C.I.'s~~ letter No. PL-20(2)51
 dated nil, as per draft put up for appl.

29.11.51. *mean for a fortnight.*
29/11/51

J. A. F.

Sh B
And with your
& Resubmit to
me on
12/12/51

CB.

D Submitted.

2. The draft at P. 73 e/s may now
 be, if appd.

18.12.1951.

to
19/12/51 Enpt.

+ 21

Letter.

From

The Superintending Engineer,
S.C. Belgaum.

To

The Secretary to Government,
Public Works Department. Bombay.

No.B.M.19.

Public Works Department.
Belgaum, 12 June 1948.

Subject:- MarmaGoa - Belgaum- Poona Road
P.H.No.2 - Bridge over the Malaprabha
River at Khanapur.

The construction of the above bridge has been included in the first five year programme of P.W.Road - Development Works. During this year it is proposed to take borings necessary for obtaining foundations data for the design to be prepared by the Executive Engineer, Designs Division.

2. The new bridge is proposed to be sited near mile 17/3 of the Belgaum Lingamath Road., Upstream of the existing low level causeway on the same river. A blue print copy of site plan showing the proposed alignments viz. that originally proposed by the Executive Engineer late Road Projects Division (South) and that subsequently modified by the late Superintending Engineer, Project Circle, and also the detailed features of the river and the country round about is enclosed herewith. It is reported that the - alignment proposed by the late Superintending Engineer, Project circle has been approved by the late Chief Engineer P.W.D.Poona in his No.561/46-W dated the 27th August 1946.

3. The undersigned has inspected both the above mentioned alignments with the following observations:-

(i) The alignment proposed by the Executive Engineer late Road Projects Division (South) has the following - technical advantages.

(a) Rock is exposed in a major part of the river bed at the site,

(b) the site is in a straight reach between two river bends.

The site proposed by the late Superintending Engineer, Project circle is not only lacking in the above two - advantages but is definitely at a disadvantage as it is too near one of the river bends.

(ii) It would appear that the modification has been proposed by the late Superintending Engineer, Project circle solely with a view to obtaining 1600 feet radius curves in the approaches on either bank. In the original site - proposed by the Executive Engineer late Road Project Division (South), the corresponding radii are 800 feet & 1200 feet.

4. The revised road plan of July 1946 lays down for - Provincial Highways desirable curves of 3 degrees (1910 feet radius) and permissible curves of 6 degrees (955 feet radius) in plains. Such standards wherever they could be secured are no doubt desirable but exceptional circumstances should - permit slight deviations and a 800 feet radius is not a material deviation from 955 feet. Further, as this curve will be close to the Khanapur town, it is not considered that vehicles will be travelling at speeds greater than 30 M.P.H.

A 800 feet curve will be good enough to negotiate such speeds and even higher ones, when properly transitioned.

5. There are, however, other considerations also which favour the selection of the old site proposed by the ~~Executive Engineer, late Road Projects Division (South)~~. On the right bank Messrs. Ghatge & Sons have already commenced the construction of a pottery factory on the understanding that the old site was the finally fixed one as it was demarcated with stones. If the alignment as modified subsequently by the Superintending Engineer Project circle is adhered to, Mr. Ghatge would urge a serious objection as he contends that it would block all his future expansion. Similarly on the left bank the lands belongs to Messrs. Damle Brothers of Khanapur who already have an old factory there and want to put up an enlarged one. With the old alignment the fragmentation of their holding is more suitable to them than with the new one though they have no objection to urge against the modified alignment.

6. In view of what has been stated above and looking to the technical advantages of the old site, coupled with the fact that a curve of radius 800 feet at the site is good enough, the undersigned considers that the old site proposed by the Executive Engineer, late Road Projects Division (south) should be finally adhered to.

7. Accordingly the Executive Engineer, Belgaum Division, has proposed to take 3 bores at chainages 1840, 1890 & 2107 as indicated on the longitudinal section (blue print plan - enclosed) and the undersigned has approved of it.

8. In the circumstances, I request you please to approve of the change in the alignment for the reasons given above.

Accompt:-

2 Blue prints.

Bt.12/6.

x M. C. Bulsara.

Superintending Engineer, S.C.

12/6

C 12/816

Recd. 12/6

P. V. D.
File No. 9551/36
Serial No. 32242

CB I

12-6-18

Not to issue
Letter

327

No. 9551/36-C(1)

P.W.D.
B.C. June 1948.

To

The S.E., S.C.

Subject: Marmagao-Belgaum-Poona Road,
P.H. No. 2.
Bridge over the Malaprabha River
at Khanapur.

....

Reference: Your letter No. B.M. 19, dated the
12th June 1948.

2. In the circumstances explained, Govt.
approves the old site proposed by the Ex. Engr., late
Road Projects Dn. (South), for the ~~new~~ bridge over
the Malaprabha River at Khanapur on the Marmagao-
Belgaum-Poona Road.

3. Since the work has been included in the
P.W. Road programme for the year 1948-49, you are
requested to expedite the submission of the plans and
estimate for the bridge.

D.A. Nil.

By order of the G. of B.

Copy, with a copy of the S.E.'s letter replied
to, forwarded to the S.E., B.C. and the Ex. Engr., Designs
Dn., for information.

nd
24-6-48

81 000 100 000 100 000 100 000

✓
DS (RHS)

RM
29/6/48

Letter.

From

The Superintending Engineer,
Southern Circle, Belgaum.

To,

The Secretary to Government,
Public Works Department, Bombay.

No.B.M.19.

PUBLIC WORKS DEPARTMENT
BELGAUM, 12th June 1948.

Subject:- Marmagao-Belgaum-Poona Road
P.H.No.2- Bridge over the Malaprabha
River at ~~Axx~~ Khanapur.

The construction of the above bridge has been included in the first five years programme of P.W.Road Development Works. During this year it is proposed to take borings necessary for obtaining foundations data for the design to be prepared by the Executive Engineer, Designs Division.

2. The new Bridge is proposed to be sited near mile 17/3 of the Belgaum Linganmath Road, Upstream of the existing low level causeway on the same river. A blue print copy of site plan showing the proposed alignments viz. that originally proposed by the Executive Engineer late Road Projects Division(South) and that subsequently modified by the late Superintending Engineer, Project Circle and also the detailed features of the river and the country round about is enclosed herewith. It is reported that the alignment proposed by the late Superintending Engineer, Project Circle has been approved by the late Chief Engineer P.W.D. Poona in his No.561/46-W dated the 27th August 1946.

3. The undersigned has inspected both the above mentioned alignments with the following observations:-

1) The alignment proposed by the Executive Engineer late Road Projects Division(South) has the following technical advantages.

a) Rock is exposed in a major part of the river bed at the site.

b) The site is in a straight reach between two river bends.

The site proposed by the late Superintending Engineer, Project circle is not only lacking in the above two-advantages but is definitely at a disadvantage as it is too near one of the river bends.

ii) It would appear that the modification has been proposed by the late Superintending Engineer, Project Circle solely with a view to obtaining 1600 feet radius curves in the approaches on either bank. In the original site proposed by the Executive Engineer late Road Project Division(South) the corresponding radius are 800 feet & 1200 feet.

4. The revised road plan of July 1946 lays down for Provincial Highways desirable curves of 3 degrees (1910 feet radius) and permissible curves of 6 degrees (955 feet. radius) in plains. standards wherever they could be secured are no doubt desirable but exceptional circumstances should permit slight deviations. A 800 feet radius is not a material deviation from 955 feet. Further, as this curve will be close to the Khanapur town, it is not considered that vehicles will be travelling at speeds greater than 30 M.P.H.

A 800 feet curve will be good enough to negotiate such speeds and even higher ones, when properly transitioned.

5. There are, however, other considerations also which favour the selection of the old site proposed by the Executive Engineer late Road Projects Division(South) on the right bank Messrs. Ghatge & Sons have already commended the construction of a pottery factory on the understanding that the old site was the finally fixed one as it was demarcated with stones. If the alignment as modified subsequently by the Superintending Engineer Project Circle is adhered to, Mr. Ghatge would urge a serious objection as he contends that it would block all his future expansion. Similarly on the left bank the lands belong to Messrs. Damle Brothers of Khanapur who already have an old factory there and want to put up an enlarged one. With the old alignment the fragmentation of their holding is more suitable to them than with the new one though they have no objection to the modified alignment.

6. In view of what has been stated above and looking to the technical advantages of the old site, coupled with the fact that a curve of radius 800 feet at the site is good enough, the undersigned considers that the old site proposed by the Executive Engineer late Road Projects Division(South) should be finally adhered to.

7. Accordingly the Executive Engineer, Belgaum Division, has proposed to take 3 bores at chainages 1840, 1890 & 2107 as indicated on the longitudinal section (Blue print plan enclosed) and the undersigned has approved of it.

8. In the circumstances, I request you please to approve of the change in the alignment for the reasons given above.

Accompt:-
2 Blue Prints.

Sd/- N. C. Bulsara.
Superintending Engineer, S.C.

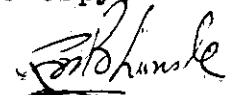
Copy forwarded, with compliments, to the Executive Engineer, Belgaum Division with reference to his letter No. B.M.19/Khanpur dated the 24th May/48. His action regarding taking bores in anticipation is approved.

2. ANOTHER SET OF BLUE PRINT plans should please be submitted for record in this office. One more set may also be sent to the Executive Engineer, Designs Division.

3. While furnishing the design data, the existence of the causeway on the downstream and the Railway bridge upstream should be specifically brought to the notice of the Executive Engineer (Designs) Division as indicated in the Inspection Notes of 13th March 1948.

Copies forwarded with compliments to the Executive Engineer, Designs Division, Poona for information.

True Copy:-


Head Clerk,
Ex. Engr.
Designs Division, Poona.



No.105/ 5703 of 1946.
PWD: Project Circle office,
Poona: 16th August 1946.

To

The Chief Engineer,
Post War Reconstruction,
P O O N A:

Subject:- Major Bridges:
Bridge across Malaprabha River near
Khanpur in Mile No.17/6&7 on Marmagao-
Belgaum-Poona Road P.H.No.N.P.3 of
Belgaum District:

The plans regarding the above work are submitted herewith for favour of your approval of the site proposed for constructing the above mentioned bridge.

2/- The recommended Site A and the alignment are shown in red pencil in plan No.3/4. This alignment gives a right angled crossing and curves of radius of 1600 ft. This is more clearly shown by X Y worked in pencil on contour plan No 4/4.

3/- The river floods last from 5 to 8 days during monsoon and as the road is an important one directly connecting Belgaum with Kanara District and Goa frontier full bridge is proposed. The site is narrow and suitable with exposed rock foundation on the right side. Borings are therefore proposed to be taken to know the exact nature of rocky stratum on the left bank of the proposed site.

4/- The construction of this bridge is included in the first five years programme.

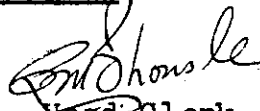
Accompts:-
Plans Nos.4

Sd/- ...

Superintending Engineer,
Project Circle.

Copy forwarded with compliments to the Executive Engineer R.P.Dn.South, for information w.r. to his No.P3886 of 10.7.46.

True Copy:-


Head Clerk,
Ex.Engr., Designs Dn.,
Poona.

GOVERNMENT OF INDIA
MINISTRY OF TRANSPORT
ROADS ORGANIZATION.

Jamnagar House,
Dated, New Delhi, the 8th March 1948.

Dear Bhate,

In the last meeting of the Standing Committee for Roads some members had put forward a Resolution requiring that a West Coast Road connecting South Kanara and Bombay should be made a National Highway. In order to investigate the possibilities of this, I have arranged a programme, a copy of which is enclosed.

So far as Madras portions are concerned, I have been able to get information from the officers and with their guidance I shall be making inspections, but in the case of Bombay, few people here know about the conditions there, and I have to request you to give me some information or direct somebody who is in charge of those parts to give me all the information I require during my inspection.

As far as I see from the map, I find it is possible to go along the Coast Road as far as Kunta. If we take the Coast Road beyond Karwar, I find that we will be up against high mountains, if you want to avoid the Portuguese territory. Hence I think it will be desirable to branch off about 10 miles to the South of Ankola to Yelapure along an existing road, thence to Ainavar and join National Highway No. 4 at Kittur, midway between Darwar and Belgaum. As far as I could see from the map this route appears to be the most suitable. Further there is also a strong objection for running another road at huge cost from Ankola to Bombay along the coast in addition to the National Highway No. 4, which will run parallel to it at a distance of about 50 miles. I want to come along the route proposed by me and then discuss the matter with you. I would request you to let me ~~and know~~ know whom I have to contact to get some help during my inspection from Batkal on to Kittur. If any of your officers can be instructed to meet me at Batkal about the 30th of this month, it will be very helpful. I shall let you know later the exact date and time at which I shall be coming to Batkal. Please reply to my address at Madras "No. 7 Gopalapuram, 2nd Street, Cathedral Post, Madras"

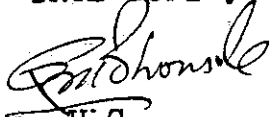
Thanking you,

Yours
Sd/- A. NAGESWARA AIYER.
PLANNING OFFICER (ROADS)

P.S. Please consult ~~the~~ the Chief Engineer about his views and apprise him of the purpose of my visit. We may discuss the whole matter when I come there. I have also to see and select one road in consultation with you all, in Poona city which can be classed as National Highway.

Sd/-

" TRUE COPY".


H.C.

Ex-Engr., Designs Dn,
Poona 1.

Below copy of the endorsement letter No.B.M.19 of 12-6-1948 from the Superintending Engineer, Southern Circle, addressed to the Secretary to Government, P.W.D., Bombay regarding the approval of the alignment for a Bridge across the river Malaprabha at Khanapur on Marma Goa-Belgaum-Poona Road- Provincial Highway No.2.

No.13/48 /1752

OFFICE OF THE EXECUTIVE ENGINEER,
DESIGNS DIVISION,
POONA NO.1. Dated. /3rd June 1948.

Passed on with compliments to the Superintending Engineer, Bombay Circle, Bombay with the following observation for further disposal.

2. The construction of a bridge across the river Malaprabha at Khanapur is included in the list of bridges proposed to be taken up under P.W.R. Programme for 1948-49 and it stands at S.No.12 in that list.
3. From the above mentioned letter No. it is seen that there are two sites under consideration for this bridge viz. i) As originally proposed by the late Executive Engineer, Road Projects Division(South). ii) As modified by the late Superintending Engineer, Project Circle and subsequently approved by the late Chief Engineer, P.W.D., Poona. It is also seen that the Superintending Engineer, Southern Circle, has recommended the alignment No.1, for approval of the Government in P.W.D. though this alignment involves very sharp curve of radius of 800 ft. on the grounds that for a speed of 30 m.p.h. 800 ft. radius curve is sufficient and this deviation from the permissible curve of 6° (i.e. 955 ft. radius) is very slight.
4. It is now established practice that the alignment of highways should conform to the modern standards of 'Geometric design' and the location and design of a cross chainage work should suit that alignment. This is the point emphatically stressed by General Fleming Administrator of Federal Works Agency, U.S.A. and Mr. T.H. MacDonald, Commissioner of Public Roads Administration U.S.A. in their interim report on their visit to this country in 1946. An unsatisfactory alignment can be improved only at prohibitive cost. During the orientation lectures given by the officers of the P.R.A. to the members of the Second Road Engineers' delegation to U.S.A., this point regarding 'Geometric' design was specifically stressed once and again and we were advised not to repeat the same mistakes of bad alignments committed by them in the past. To begin with we may have lower standards for width of road surface etc. but not lower the geometric standards of alignment. Such deviations from the Standards do not appear desirable on the Provincial Highway like this. On the contrary a minimum desirable curve of 3° (1910 ft. radius) should be aimed at, if possible, as the road at this place is in a flat country. With the increasing use of high speed automobiles the driving speed of the vehicles is increasing day by day, and as such it is not desirable to design the curves on this Provincial Highway to a limited speed of 30 m.p.h. when easy and smooth curves of bigger radius for a speed of 50 m. can very well be given by little shifting of the alignment by 175 ft. to the downstream. It may be mentioned here that Government of India have fixed a speed limit of 50 m.p.h. for Provincial Highways and National Highways. (Please vide paper No.119 published in I.R.C. Journal Vol.XI-3). This limit may still be raised in future.

5. In a D.O. letter dated 8-3-1948 from Dewan Bahadur Nageshwar Aiyar, Planning Officer, Roads, Government of India (Copy enclosed) it is stated that Government of India is considering a proposal of converting a West Coast road connecting

connecting South Kanara and Bombay into a National Highway. This proposed National Highway branches of about 10 miles to the south of Ankola to Yellapur along an existing road thence to Alnawar and joins National Highway No.4 at Kittur mid way between Dharwar and Belgaum. But later on after inspecting the alignment he was considering to join it to the National Highway No.4 at Belgaum via Khanapur. As Government of India is still considering this case, it seems advisable that standards lower than those prescribed for National Highway may not be adopted.

6. The late Superintending Engineer, Project Circle, recommended the alignment No.(II) with a view to have a right angled crossing and curves of bigger radius of 1600 ft. (Please vide his office letter No.105/5703 of 16th August 1946, enclosed). From plans attached herewith it is seen that the alignment No.1 is rather skew. A detailed contour plan may also be called for before finalising the alignment.

7. The type of the river bed met with at both the alignments appears the same. Rock is exposed on the right bank and borings have to be taken to ascertain the foundation strata on the left bank. Therefore the cost of the foundation and subsequently the cost of the bridge will be the same in both the cases. From the plans it is also seen that the alignment No.1 is near to the river bend on the up stream side rather than the alignment No.1 to the river bend on the down stream side. In fact the river bend on the down stream side actually takes off after half a furlong from the alignment No.(II). It is desirable to have as long a straight approach channel as possible.

8. The points mentioned in para 5 of the Superintending Engineer, Southern Circle's letter may perhaps be considered in relation to the above.

9. For the reasons stated above, it is stressed again that the alignment No.(II) which gives right angled crossing with bigger curves of 1600 ft. radius, may please be got finally approved by Government.

15.8.48
EXECUTIVE ENGINEER, DESIGNS DIVISION.

D.A:-

- i). D.O. letter of 8.3.48 from Dewan Bahadur Nageshwar Aiyer.
- ii). S.E.P.C's letter No. 105/5703 of 10-8-48.
- iii). Plans five in one file.
- iv). Designs in File No. 13/48 (to be returned file)

Below Executive Engineer, Designs Division's No. 13/48/1792
of 18th June 1948 - Bridge at Khanapur on Malaprabha.

No: Br-12/5723

Public Works Department,
Bombay, 23rd June 1948.

Passed on, with compliments, to the Secretary to Government,
Public Works Department, Bombay.

13
2. I agree with the views expressed by the Executive Engineer,
Designs Division, in paragraph 4 of his endorsement. As the
foundation conditions and the cross section of the river are
similar for both sites, I favour the downstream one as it enables
approaches of correct geometrical standards to be provided.

23.6.48
Superintending Engineer,
Bombay Circle.

Copy forwarded, with compliments, to :-

- (1) The Superintending Engineer, Southern Circle.
- (2) The Executive Engineer, Building Projects Dn., No. I, Poona.
- (3) The Executive Engineer, Designs Division, Poona.

In the old design, the discharge seems to have been
underestimated. The discharge for 215 square miles for fanshaped
catchment by Inglis formula will be about 10,500 cusecs. If the
foundations are good more spans will have to be added on the
shoulders also.

MCP:22-6-48.

C112
2416
1218 54601

4/16

P. W. D.
File No. 9551/36
Serial No. 33467

Letter

No.9551/36-C(I)

P.W.D.
B.C. 2nd July 1948.

To

The S.E.,S.C.

Subject: Marmagao-Belgaum-Poona Road,
P.H.No.2.
Bridge over the Malaprabha River
at Khanapur.
...

Reference: Your letter No.B.M.29 dated the 12th June 1948, and S.E.,B.C's endt.No.Br.12/5723,dated the 23rd June 1948.

2. According to the remarks made by the Ex.Engr., Designs Dn.,and the S.E.,B.C.,in their endorsements Nos. 13/48/1752 and Br.12/5723,dated the 15th and 23rd June 1948, respectively, the foundation cost of both the sites for the proposed bridge will be the same. Govt. therefore approves the alignment No. ^(II) which gives a right-angled crossing and better radii of curvature.

3. Since the work has been included in the P.W.Road programme for the year 1948-49, you are requested to expedite the submission of the ~~plans and estimate for the bridge.~~ data to E.E. Designs Dn. who shd in turn submit pac^d to Govt at a v. early date.
By order &c.

D.A. Nil.

Copy forwarded for information to -

the S.E.,B.C. (with ref.to his endt.No.Br.12/5723, dated the 23-6-48),

the Ex.Engr.,Designs Dn.(with ref.to his endt. No.13/48/1752,dated the 15-6-48),

the Ex.Engr., Belgaum Dn.,

2. Two files received from the Ex.Engr., Designs Dn. (one containing plans and another containing corres) are herewith returned.

2/5
30-6-48
1-7

Use the same

B(504)

54
11/7/48

Letter.

No. 9551/36-G(I).

Public Works Department,
Bombay Castle, 2nd July 1948.

75

The Superintending Engineer, Southern Circle.

Subject: -Marmagao-Belgaum-Poona Road,
Provincial Highway No.2.
Bridge over the Malaprabha River
at Khonapur.

Reference: Your letter No.B.M.19 dated the 12th June 1948, and Superintending Engineer, Bombay Circle's endorsement No.Br.12/5723, dated the 23rd June 1948.

2. According to the remarks made by the Executive Engineer, Designs Division, and the Superintending Engineer, Bombay Circle, in their endorsement Nos.13/48/1752 and Br.12/5723, dated the 15th and 23rd June 1948, respectively, the foundation cost/at both the sites for the proposed bridge will be the same. Government therefore approves the alignment No.II which gives a right-angled crossing and better radii of curvature.

3. Since the work has been included in the Post War Road programme for the year 1948-1949, you are requested to expedite the submission of the data to Executive Engineer, Designs Division, who should in turn submit plan and estimates to Government at a very early date.

By order of the Governor of Bombay,

C. J. J. J.
for Deputy Secretary to the Government of Bombay,
Public Works Department.

D.A:-Nil.

Copy forwarded for information to -

- the Superintending Engineer, Bombay Circle (with reference to his endorsement No.Br.12/5723, dated the 23rd June 1948),
- the Executive Engineer, Designs Division (with reference to his endorsement No.13/48/1752, dated the 15th June 1948),
- the Executive Engineer, Belgaum Division.

2. Two files received from the Executive Engineer, Designs Division (one containing plans and another containing correspondence) are herewith returned.

GD/3/7/48.

RECEIVED
17/48
17/48

Letter.

From

The Superintending Engineer,
Southern Circle.

To

The Secretary to Government,
Public Works Department,
B O M B A Y.

No.B.M.19

Public Works Department,
Belgaum, /3rd October 1948.

Subject :- Marmagaon Belgaum Poona Road -
P.H.No.2
Bridge over the Malaprabha River
near Khanapur.

✓² Reference :- Govt. (P.W.D.) Expeditor No.9551/36-
C(1)/2, dated the 6th October 1948.

The necessary data required for design purposes
is still awaited from the Executive Engineer, Belgaum
Division, who is being expedited this day for very
expeditious submission.

SDK.

X
[Signature]
Superintending Engineer, S.C.

21/10/48

13(1)

The S.E.S. c. expedited

9551/36 - C(1), 2 4-3-49

2A
2/3/49

~~Handwritten notes and signatures~~

ISSUED
4-3-49 m.w.

Handwritten notes:
18/10
2/15/62

P. W. D.
File No. 9551/36
Serial No. 56900

Handwritten notes:
E 01
15-11-68

Letter.

From

The Superintending Engineer,
Southern Circle.

To

The Secretary to Government,
Public Works Department,
B O M B A Y.

No. B.M.19.

Public Works Department,
Belgaum, 10th March 1949.

Subject:- Marmagaon-Belgaum Poona Road:
P.H.No.2.
Bridge over the Malaprabha River
near Khanapur.

122 Reference:- Government Expeditior No.955/36-C
-(I), dated the 4th March 1949.

The Executive Engineer, Belgaum Division has recently submitted some preliminary data to the Executive Engineer, Designs Division, and is collecting the remaining data. He is being expedited to submit the same early.

VDK.

X
S S Wren
Superintending Engineer, S.C.
9/3

CH(1)

Amail p 19

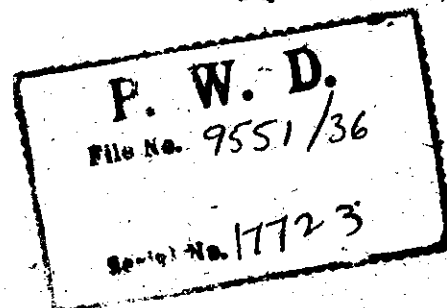
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A 43

~~Am 11-5-4~~
~~16-3-4~~

B I 14/3



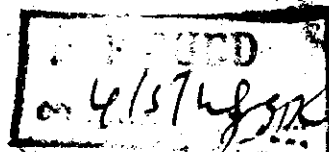
CH(1)

The S.E.S.C. expedition under No. 9551/36 C(1)

4-5-4

4-5-4

~~Am 11-5-4~~
~~4-6-4~~
5174



B I 14/3

Letter.

From

The Superintending Engineer,
Southern Circle.

To

✓
The Secretary to Government,
Public Works Department,
B O M B A Y.

No.B.M.19.

Public Works Department,
Belgaum, 10 May 1949.

Subject :- Marmagao Belgaum Poona Road -
P.H.No.2. Bridge over the
Malaprabha river near Khanapur.

124

Reference :- Government expeditor No. S 551/36-
C(I), dated the 4th May 1949.

The Executive Engineer, Belgaum Division reports that the collection of survey data in connection with the above bridge work is still in progress and that he expects to complete the same before June 1949. He is being expedited this day for submitting the survey data earlier than June, if possible.

sdk.

S. S. W. S.
X
Superintending Engineer, S.O.
14/5

9551/36
32161

P.W.D.

CB(1)

subd. for information
Await. P.W.D.

22
1354p

1375hp

CB(1)

Re S.E.S.C. expedited
Order No. 9551/36-CC(1) of the 21st July 1954

19-7-54
22
20/7/54

21/7/54

CB(1)1315

22/7/54

P. W. D.
9551/36
32161

C.V.

Letter.

From

The Superintending Engineer,
Southern Circle.

To

The Secretary to Government,
Public Works Department,
B O M B A Y,

No.B.M.19.

Public Works Department,
Belgaum, 26 July 1949,

Subject :- Marmagao Belgaum Poona Road :
P.H.No.2 Bridge over the Malaprabha
River near Khanapur.

Reference :- Government Expeditor No.9551/36-C(I)
dated the 21st July 1949. 26

The Executive Engineer, Belgaum Division has --
submitted the necessary survey data to the Executive -
Engineer, Designs Division, under his No.B.M.19/Khanapur
dated the 22nd July 1949. Trial bores have been taken
and the results of the same are being communicated to
the Executive Engineer, Designs Division separately.

2. Since the bridge in question lies on the proposed
west coast National Highway preliminary design note for
the bridge will have to be got approved by the Consulting
Engineer to the Government of India (Roads) just as in
the case of four bridges in the Kanara Division.

sdk.

S. S. Sule
Superintending Engineer, S.C

25/7

9551/36

49881

Letter

From

The Superintendent Engineer
Southern Circle

CB (1)

P.W.D.

The Secretary to Government

At work further

9551/36
10/1/57

8.11.57
No. 9551/36

Subject: - Mangalore Road
P.W.D. over the Mangalore
River near Mangalore

Government Engineer No. 9551/36
dated the 21st July 1957

20/1-57
A.P.

The Executive Engineer, Mangalore Division has
submitted the necessary survey data to the Executive
Engineer, Mangalore Division, under his No. 9551/36 dated
the 21st July 1957. The data has been taken
and the results of the same are being communicated to
the Executive Engineer, Mangalore Division separately.

2. Also the works in Mangalore Division for
West Coast Road of Highway preliminary design for
the bridge will have to be approved by the Committee
formed by the Government of India (Mangalore) and in
the case of P.W.D. in the Mangalore Division.

C.B. (1)

P.W.D.

The S.E.S.C. expedited under

No. 9551/36-C(1) dt. 8th Feb. 50.

Superintendent Engineer

20/1

1/1/57

8/2/57

20/1/57

22/7/57

T.D.
9551/36
49881

No. 13/48/3972

Office of the Executive Engineer,
Designs Division,
Poona.1. Dated: 30th December 1949

To

The Superintending Engineer,
Bombay Circle, Bombay.

Constructing a bridge across the Malaprabha river
near Khanapur in mile No.17/6 and 7 of
Marmagosa Belgaum Poona Road. (P.H.No.2)
Belgaum District. --

A Preliminary report in the first instance for the
above work is submitted herewith for favour of your perusal
obtaining approval of Government to the same.

2. The construction of the above work is included in
the first five year programme of Post War Road development
scheme. This work stands included at S.No.25 in the list of
works proposed to be taken up in southern circle vide Govt
Public Works Department circular memorandum No.8666/X36-IX
19th November 1948.

3. This bridge lies on a West coast road in which Govt
of India is keenly interested to develop the same and to
raise it to the standard of National Highway vide Government
of India letter No.PL-13(5)/49 dated the 23rd May 1949, copy
endorsed to you by Government under their letter No.9598/3
of 17th June 1949. This also has got reference to your letter
No.6-160/13613 dated the 19th November 1949 copy endorsed
to this Office.

4. Two alternative proposals have been made for
case.

i) A High level bridge costing Rs. 5,26,000
including approaches.

ii) Submersible bridge costing to Rs. 1,74,100
including approaches.

for the reasons stated in the Preliminary Report
it is recommended to get the submersible bridge proposed
approved by the Government. The silt is suitable for the
construction of submersible bridge. Also this will act for
all practical purposes as high level bridge as the water level
is kept at R.L. 2,149.50. From the hydrograph vide plan No.
for site II it will be seen that the maximum High Flood
recorded in the last 13 years, is at R.L. 2116.3

Sup. A below
(P. 2872
7.9598/36-2)

61

So if a submersible ~~bridge~~ bridge is provided at the place, traffic will be interrupted once in 20 or 25 years.

5. The bridge has been designed for two lanes of class and one of class AA loading. The roadway on the bridge is to be kept 22'-0" clear ^{between} inclusive kerbs.

6. The road has been classified as a Provincial Highway in the Post War development plans. But as it is eventually proposed to be upgraded to National Highway standard. It is proposed to provide a road width of 32'0" on the approaches.

7. No land acquisitions has been proposed at this stage as it will be common factor between the two alternatives proposed. The same will be done at the time of submitting fair project.

8. The rates adopted in framing the estimate for the two alternatives proposals are 1938-39 rates plus 100% increase.

9. Early approval to this Preliminary report may please be obtained so that the fair plans and ~~submitted~~ estimates for technical sanction may be taken in hand early as a budget provision of Rs.25,000/- has been made for this work during the current financial year.

15.10.42
S/N

D.A.:- 1) One file of Preliminary report. Executive Engineer, Designs Division.
(in duplicate)
2) One file of Plans. ⁱⁿ 30/12

Copy forwarded, with compliments, to the Executive Engineer, Belgaum Division, for information.

2. He is requested to observe the ^{hydraulic} Natural gradient ^{highly} frequently during high floods at the proposed bridge site next season.

Copy forwarded, with compliments, to the Superintending Engineer, Southern Circle, Belgaum, for information.

To:
The Chief Engineer,
Public Works Department,
Bombay.

Subject:- Constructing a bridge across the Malaprabha river near
Khanapur in mile No. 17/6-7 of Marmagao=Belgaum-Poona
Road (P.H.No.2). Belgaum District.

Reference:- The Superintending Engineer, Southern Circle's letter
No. B.M.19 dated 26th July 1949 addressed to the Secretary, P.W.D., Bombay
and copy endorsed to this office.

2. I forward herewith a preliminary report for the above work for
obtaining the approval of the Government thereto.

3. The bridge^{lies} on the West Coast road which is likely to be a National
Highway, vide Government of India letter No. FL-13(5)/49 dated 23rd May
1949, copy endorsed to me under their letter No. 9598/36-C(I) dated 17th
June 1949 and the Superintending Engineer, Southern Circle's letter No. G.92
dated 31st August 1949 addressed to Secretary P.W.D., Bombay. Since this
Government has agreed with the Government of India to the principle of
matched grants vide Government P.W.D. letter No. 9598/36-C(I) dated 5-10-1949,
approval of Government of India may be obtained to this preliminary report.

4. As regards the site of the bridge, three sites have been investigated
for constructing a bridge across the river vide plan No. 1. The site No. 2
was approved by Mr. C.G.Kale, the then Chief Engineer, Post War Reconstruction.
These sites have also been inspected by me and I agree with the Superintending
Engineer, Southern Circle's proposal of crossing the river at Site No.3.

5. The Executive Engineer has considered two alternative proposals:-

- (a) A full bridge costing Rs. 5,26,000/- including approaches with
5 spans of 60' clear balanced cantilever R.C.C. bridge.
- (b) A submersible bridge costing Rs. 1,74,000/- including approaches
with 6 spans of 40' R.C.C. slab bridge.

6. Since the difference in costs of a full bridge and a submersible bridge
is considerably large and since a submersible bridge is designed in such a
way that the interruption to the traffic is rare, say once in 20 or 25 years,
provision of a submersible bridge as proposed by the Executive Engineer is
recommended.

7. Since the road is proposed to be upgraded to a National Highway
Standard a clear road with 32' for approaches has been proposed.

8. The Executive Engineer, Designs Division's letter No. 13/48/3972 dated
30th December 1949 accompanies.

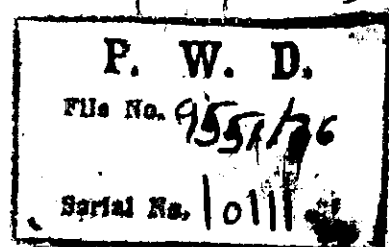

Superintending Engineer

A.-

Ex. Engr., Designs
Dn's. letter.
One file of plans.
2 files of estimates
and design note.

RR:MCP:
-2-50.

Pl ina \$ 1 (N/S)



To

The Superintending Engineer,
Bombay Circle, Bombay.Subject : Constructing a bridge across the
Malaprabha river near Khanapur in
mile No.17/6 and 7 of Marmagao
Belgaum Poona Road (P.H.No.2)
Belgaum District.

A preliminary report in the first instance for the above work is submitted herewith for favour of your perusal and obtaining approval of Government to the same.

2. The construction of the above work is included in the first five year programme of Post War Road development scheme. This work stands included at S.No.2 in the list of works proposed to be taken up in Southern Circle vide Government, P. W. D., Circular Memorandum No.8666/36-IX of 19th November, 1948.

3. This bridge lies on a West coast road in which Govt. of India is keenly interested to develop the same to raise it to the standard of National Highway vide Govt. of India letter No.PL-13(5)/49, dated the 28th May, 1949, copy endorsed to you by Government under their letter No.9598/36-C/I of 17th June, 1949. This also has got reference to your letter No.G-160/13613, dated the 19th November, 1949, copy endorsed to this office.

4. Two alternative proposals have been made for this case.

- i) A High Level bridge costing Rs.5,26,000 including approaches.
- ii) Submersible bridge costing Rs.1,74,100 including approaches.

for the reasons stated in the Preliminary report, it is recommended to get the submersible bridge proposed approved by the Government. The site is suitable for the construction of submersible bridge. Also this will act for all practical purposes as high level bridge as the road level is kept at R.L.2,119.50. From the hydrograph vide plan No.10 for site II it will be seen that the maximum High Flood Level recorded in the last 13 years, is at R.L.2116.31. So if a submersible bridge is provided at this place, traffic will be interrupted once in 20 or 25 years.

5. The bridge has been designed for two lanes of class 'A' and one of class AA loading. The roadway on the bridge is to be kept 22'-0" clear between kerbs.

6. This road has been classified as a Provincial Highway in the Post War Development plans. But as it is eventually proposed to be upgraded to National Highway standard. It is proposed to provide a road width of 32'-0" on the approaches.

7. No land acquisition has been proposed at this stage as it will be common factor between the two alternatives proposed. The same will be done at the time of submitting final project.

8. The rates adopted in framing the estimate for the two alternative proposals are 1938-39 rates plus 100% increase.

9- Early approval to this preliminary report may please be obtained so that the fair plans and estimates for technical sanction may be taken in hand early as a budget provision of Rs.25,000/- has been made for this work during the current financial year.

Accmpts:

Sd/-

one file of preliminary report (in duplicate). Executive Engineer, Designs Dn.

2. One file of plans.

@@@@@@

Copy forwarded, with compliments, to the Executive Engineer, Belgaum Division, for information.

2. He is requested to observe the hydraulic gradient freshly during high floods at the proposed bridge site next season.

Copy forwarded, w.cs., to the Superintending Engineer, Southern Circle, Belgaum, for information.

@@@@

L E T T E R

From

The Superintending Engineer,
Southern Circle.

To

The Secretary to Government,
Public Works Department, Bombay No.1.

No.B.M.19.

Public Works Department,
Belgaum: 2 March, 1950.

Subject : Marmugao-Belgaum-Poona Road, P.H.No.2.
Bridge over the Malaprabha river near
Khanapur.

Reference: Government Expeditior No.9551/36-C(I)
of 8-2-1950. 1

A preliminary report in the first instance for
the work referred to above has been submitted by the
Executive Engineer, Designs Division to the Superintending
Engineer, Bombay Circle vide his No.13/48/3972 of 30-12-49
(copy enclosed).

2. After the preliminary designs are duly got approved
by the Government of India (Roads) (as in the case of
other roads situated in the west coast viz. Karwar)
further action will be taken in the matter.

GRM.

S. S. W. S. S.
Superintending Engineer, S. C.

~~28~~

CME

The papers have been submitted to the SS (RAB) and the Co. in 22-50, the Ltr DE(R)-2 Their return is awaited.

11.3.50

Ltr. DE(R)-2

The pps have been passed on to

SS (RAB)

JAS.

13/3/50

Where are the papers at present?
Filed.
17/3/50.

CBI
713

P. W. D.
File No. 9551/36.
Civil No. 18244.

CB(i)

18-3-50

The file is believed to be with the SS (RAB).

Filed.
20/3/50. 12/3/50

3rd Letter

No. 9551/36-C(2)

B.W.D.

P.C. (Bombay No 1),

4th April ~~1950~~ 1950.

To

The Secy, B.W.D.

Sub: Constructing a bridge across
the ~~Kanjarabha~~ near Khaypore
in mile 17/6 of the Marmaga.
Belgaum - Poona Road.
p. 33

Ref. your letter No. D.M. 21/1402
dated the 8.2.1950.

2. The preliminary design note is
returned with the following remarks

for compliance and resubmission:-

i) ii) Too much emphasis ~~has been~~ ^{was not to}
laid on obtaining the value of hydraulic
gradient by working inversely i.e.
calculating the hydraulic gradient on
the basis of the discharge obtained
by Inglis' formula. Whatever
hydraulic gradient is obtained
by actual measurement during
floods, should be adopted without
trying to ~~manipulate it~~ ^{it} to fit in
with the Inglis' formula.

ii) ii) The waterway should be ^{slightly} modified
after ascertaining the correct
hydraulic gradient, but in no
case should it be greater
than that of the existing Ry. bridges.

iii)

iii) The clearance, in the case of the high-level bridge should be increased to 5'-0" ^{below the lowest point of the deck structure} as per R.R.C. specifications.

iv) In the case of the ~~low-level~~ ^{submersible} bridge, it will be more economical to have a T-beam and slab design. Such a design for submersible bridges ~~has~~ ^{has} been used in the past and has proved satisfactory.

v) The estimates should be recast at current scheduled rates.

~~Proposed~~

For C.E. to Govt., B.W.D.
(R.R.C.)

Copy forwarded for information to:

the S.E., S.C.

the En. Engr., Designs Div.

" " " , Belgaum Div.

1) One file of plans
2) Two files of estimates and design 

16.
31.5.58

4/4 (3 spare)

Letter.

No. 9551/36-C(I).

Public Works Department,
Bombay Castle (Bombay No.1)
4th April 1950.

To

The Superintending Engineer, Bombay Circle.

Subject:- Constructing a bridge across the Malaprabha
near Khanapur in mile 17/6 and 7 of the
Marnag-Belgaum-Poona Road.

Reference:- Your letter No. D.M.21/1402 dated the 28th February 1950.

The preliminary design note is returned with the following remarks
for compliance and resubmission:-

- i) The waterway should be suitably modified after ascertaining the correct hydraulic gradient, but in no case should it be greater than that of the existing Railway bridges.
- ii) Too much emphasis need not be laid on obtaining the value of hydraulic gradient by working inversely i.e. calculating the hydraulic gradient on the basis of the discharge obtained by Inglis' formula. Whatever hydraulic gradient is obtained by actual measurement during floods, should be adopted without trying to fit it in with the Inglis' formula.
- iii) The clearance in the case of the high-level bridge should be increased to 5'-0" below the lowest point of the deck structure as per Indian Roads Congress specifications.
- iv) In the case of the submersible bridge, it may be seen if it is more economical to have a T-beam and slab design. Such a design for submersible bridge has been used in the past and has proved satisfactory.
- v) The estimates should be reset at current scheduled rates.

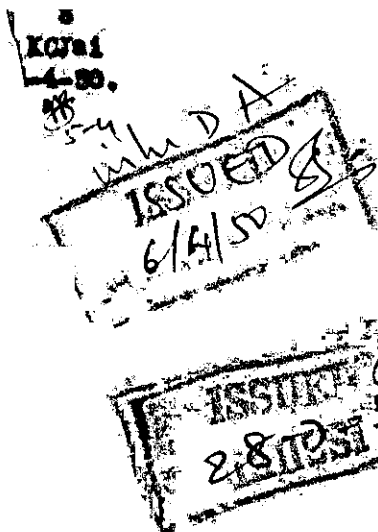
min cll

D.A.- 1) One file of Plans.
2) Two files of estimates
and design note.

For Chief Engineer to Government,
Public Works Department.

Copy forwarded for information to -

the Superintending Engineer, Southern Circle,
the Executive Engineer, Designs Division,
the Executive Engineer, Belgaum Division.



*for Lab (Sof as)
22/6*

*Am 21/5/50
27/6/50*

CB(I)

The S.E.-B.C. has been
expedited under No 9551/36-C(I)
21/28 July 50.
S. E. B. C. 22/6
S. E. B. C. 22/6

No.13/48/ 1688

Office of the Executive Engineer,
Designs Division,
Poona.1. Dated: 22 June 1950.

To

The Superintending Engineer,
Bombay Circle, Bombay.

-- Constructing a bridge over the MALAPRABHA near Khanapur
in mile No.17/6 and 7 of The Marmagao-Balgaum Poona Rd.

Reference:- Chief Engineer, Public Works Department's
letter No.9551/36-C(I) dated the 6th April 1950.

2. The preliminary note together with Plans and estimates for the above work was submitted by this Office under this Office No.13/48/3972 dated the 30th December 1949, to you for obtaining the Government approval for the same. The Government has returned the preliminary note under their letter No. ⁱⁿ under reference, for complying some remarks. The statement showing how the Government remarks are complied with is x appended herewith.

3. The main remark of the Government is about the observation of hydraulic gradient of the river at the proposed bridge site and the Executive Engineer, Belgaum Dn. is requested to observe the same during coming floods. The data regarding the hydraulic gradient in the present case may not be insisted upon while approving the preliminary note as this case will have to be kept pending till the end of this monsoon. Moreover, the change in hydraulic gradient is not going to affect the type of the bridge in this case as, for both, high ~~flume~~ level bridge and submersible bridge alternatives, the complete gorge for the respective design H.F.Ls are bridged and any change in the hydraulic gradient will not cause serious change in afflux or velocity through bridge.

4. In the preliminary report previously submitted, two alternatives were worked out for the above bridge.

1) High ~~flume~~ Level bridge	Cost =	Rs.5,26,000/-
11) Submersible bridge	cost =	Rs.1,74,000/-

The above costs were worked out according to 38-39 rates, plus 100% increase.

If.....

4/7/35

If the same are worked out according to the present day rates the cost of each alternative will be:

- | | |
|-------------------------|----------------|
| 1) High Level Bridge. | Rs. 6,87,000/- |
| 11) Submersible bridge. | Rs. 3,52,000/- |

From the above it will be seen that the ~~site~~ site is suitable for the construction of submersible bridge and hence it is recommended to get the proposal of the submersible bridge approved. From the hydrograph wide plan No.10 for site II it will be seen that the maximum High Flood Level recorded in last 13 years is at R.L. 2116.31 and the road level now proposed for submersible bridge is at R.L.2119.0. Hence if a submersible bridge is provided the traffic will be interrupted probably once in 20 to 25 years.

5. Preliminary note together with estimates is submitted herewith for reconsideration and obtaining the approval of Government for the same.

10.7.35
Executive Engineer,
Designs Division.

--

Copy forwarded with compliments to:

the Superintending Engineer, Southern Circle, Belgaum.

✓ the Executive Engineer, Belgaum Division, Belgaum.

2. He is requested to observe the hydraulic gradient at the bridge site during coming floods.

Below Executive Engineer, Designs Division's letter No.13/48/1638 dated 22nd June 1950 Re:- Construction of a bridge over the Malaprabha near Khanpur in mile No.17/6-7 of the Marmagaoa-Belgaum-Poona road.

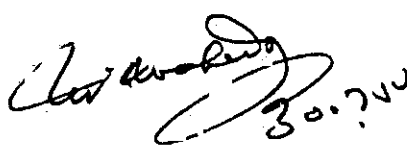
No.D.M.21/7801
p. 43-45

Public Works Department,
Bombay (No.1), 31st July 1950.

Copy forwarded to the Chief Engineer, Public Works Department, Bombay, with reference to Government letter No.9551/36-C(I), dated 4th April 1950.
p. 41

2. The remarks contained in above quoted Government letter have been complied with in the manner indicated in the statement showing the compliance of remarks attached herewith.
3. As regards hydraulic gradient of the river in question, the Executive Engineer, Belgaum Division, has been asked to observe it during the current monsoon. The result will be utilised in the hydraulic calculations while submitting the fair plans and estimates for administrative approval and technical sanction. In the meantime in order that time may not be wasted in awaiting the results of observation of Hydraulic gradient it is requested that approval of the Government to the proposals regarding Bridge Site, waterway, type of the bridge etc. contained in the preliminary report submitted herewith may please be obtained.
4. A reference is requested to paragraph 3^{p. 33} of this office letter No.DM.21/1402 dated 8th February 1950 in view of which approval of the Government of India to this preliminary report may be obtained.

D.A./-
1 statement of compliance of remarks.
1 abstract sheet (at present day rates)
1 file of plans 23 Nos.
1 file of ests. & a design note.
1 file of old plans.


Superintending Engineer,
Bombay Circle.

Copy together with a copy of this office letter No. DM.21/1402 dated 8-2-1950 forwarded to -

the Superintending Engineer, Southern Circle, Belgaum,
the Executive Engineer, Designs Division, Poona,
the Executive Engineer, Belgaum Division, Belgaum,

for information.

GRR:MAP
27/7/50

CBI
118

Acc. n.

Shen P
18.

P. W. D.
File No. 4551/36
Serial No. 62483

C 12 I

20 - 7-50

49.74
No. 9559/36-C(I).

P.W.D.,
B.C. (Bombay No.1),
19th Oct. 1950.

To

The Consulting Engineer to the Govt. of India, (R.R.)
Ministry of Transport,
Roads organisation,
Jammagar House,
New Delhi.

Subject:- Development of the West Coast Road:-
Construction of a bridge across the
Malaprabha river near Khanapur in
mile No.16/7 and 7 of Marmagao Belgaum -
Poona Road, (P.H.)

Sir,

With ref. to the correspondence ending with this Govt.
letter No.9559/36-C(I), dated 17-1-50, I am directed to for-
ward herewith a preliminary design note and the rough plans
and estimates for constructing a bridge across the Malaprabha
river near Khanapur in mile No.16/7 and 7 of Marmagao Belgaum
Poona Road, (P.H.)

2. I am to state that this is one of the bridges necessary
for the development of the proposed West Coast Road. The
detailed information ^{received} as per para 3 of the G. of I.
letter No. P.L.13(5)49, dt. 28-5-49 has been received. Addi-
tional information however, has been called from the local officer
concerned and the same will be furnished on receipt. In the
meantime the present project may please be considered in its
technical aspect. Two alternative proposals for constructing
the bridge in question ^{are} forwarded herewith, one for a high
level bridge and another for a submersible bridge. This Govt.
however, recommends the latter proposal.

3. I am therefore, to request that your technical approval
to the preliminary design note and the rough plans and estimates
may kindly be accorded; whereafter detailed plans and estimates
will be prepared for the technical appl. and financial sanction
of Govt. of India.

Yours faithfully,

D. S. (R. & B.)

D.A.-1 File of plans
1 File of estimates
and design note
1 File of old plans.

1 copy below

* p. 359 of

file no. 9598/36-I
1 copy below.

+ p. 284

* p. 385-387

Copy forwarded to -

the S.E., B.C.
the S.E., S.C.

for information with ref. to the S.E., B.C.'s endt. No. ^{b. 47} ~~DM~~.

21/7801, dt. 31-7-50.

2. The S.E., S.C.'s attention is invited to his U.O.
No. Kan. 19 dt. 11/13 May 1950, and he is requested to
expedite the submission of information to Govt. very
early.

Handwritten: b.p. 387 of file
9558 / 26-II
below.

Vsm.
16.10.50.

Handwritten: 10

Handwritten: 16.10.50.

Handwritten: ~~Plan with 1 Pk copy
& Consult. Pr. before work
18/10/50~~

Handwritten: W.K.
19/10

Handwritten: Issued
24-10-50
with 1 File
of plans
1 File of estimates
& design notes
1 File of of plans
Prs consulted

Handwritten: Aut (1/12/50)
25/10/50

Handwritten: TC CBII
5/12/50

Handwritten: Eln S.
8/12 To CBII On P. of crop by letter

No. 9551/36-e (I)

St. 21 P.W.D.

B.C., (Bombay No. 1)

~~23rd December 1951~~
2nd Jan 1952

To

The Consulting Engineer to the Government
of India (Roads).

Ministry of Transport,
Roads Organisation,
Tammagor House,
New Delhi.

Sir,

Sub: Development of the West Coast
Coast Road:—

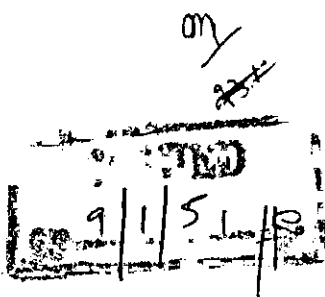
Malaprabha river near
Khanapur in mile No. 16/7 and
Jaf Marmagora Belgaum +
Poona Road, (P.H.).

I am directed to invite your
attention to the Government letter
No. 9551/36-e (I) dated 19-10-1951 on the
above subject, and to request you to the
favor of an early reply
~~please expedite the matter:~~

1 mil

Yours faithfully,

J. A. S.



W^m
11/1

Issued
27/12/51

A
11/1/52

Government of India
MINISTRY OF TRANSPORT:ROADS ORGANISATION
JAMNAGAR HOUSE:NEW DELHI.
Telegrams "ROAD IND"

No. PL-20(2)51

Dated: 27 JAN 1951

From:

The Consulting Engineer to the
Government of India (Roads)

To:

The Secretary to the Government of Bombay,
Public Works Department,
Bombay Castle (Bombay No. 1).

Subject:- Development of the West Coast Road.

Construction of a bridge across the Malaprabha river
near Khanapur in mile No. 16/7 and 7 of Marmagoa-
Belgaum-Poona road, (Provincial Highway).

17/6+7

Sir,

With reference to your letter No. 9551/36-C(I), dated the
19th October 1950 (and subsequent reminder No. 9551/36-C(II),
dated the 2nd January 1951) I am to say that the Marmagoa-Belgaum
road (on which the proposed bridge lies) does not fall along the
alignment of the proposed West Coast Road and the Government of India
have not agreed to contribute towards the development of the
Marmagoa-Belgaum Road. Under the circumstances, this Organisation
is not concerned in the matter. If, however, advice is sought on the
siting of the bridge and the structural soundness of the design,
we shall have no objection to examine the scheme and offer our
comments thereon.

The estimates received with your letter under reply are
returned herewith.

Yours faithfully,

K.S. Raghavachary
27.1.51

(K.S. Raghavachary)
Deputy Consulting Engineer (Roads)
for Consulting Engineer to the Government of India (Roads)

ENCL: ~~2~~ Estimates.

ls: 25.1.51.

kept but as

Please see Notes on p. 23

K-27
31/1

W. H. H. H.
3-11-11

P. W. H.
File No. 9551/36
Serial No. 923/1

C. H. H.

No.9551/36-C.

P.W.D.,
B.C. (B'bay No.1),
13th April 1951.

To

The Consulting Engr. to the Govt. of India,
Ministry of Transport,
Roads Organisation,
Jamnagar House.
New Delhi.

Subject:- Development of the West Coast Road
Construction of a bridge across the
Malaprabha river near Khanapur in
mile No.17/6 and 7 of Marmagaoa-
Belgaum-Poona Road, State Highway.

Sir,

Reference:- Your letter No.PL-20(2)/51, dated the
27-1-51.

2. The proposed bridge across the Malaprabha river
near Khanapur in mile No.17/6 and 7 is common to Belgaum-
Khanapur-Londa-Goa road as well as to Belgaum-Khanapur-
Bidyi-Alnavar-Haliyal Road. In this G.L.No.9598/36-C(II),
dated the 25-8-48 (copy enclosed for ready refce.) this
Govt. had recommended to the Govt. of India that Belgaum-
Khanapur-Bidyi-Alnavar-Haliyal Road be included in the
proposed

proposed West Coast Road via Bhatkal-Honavar-Kumta-
Madangeri-Yellapur-Haliyal-Belgaum Road. It is presumed
that the Govt. of India have accepted our recommendation. ①
This is also clear from the discussion which Hon'ble Shri m?
K. Santhanam had with the H.M., P.W.D., Bombay on the 5th pat
Jany. 1949. *(copy of the minutes of this meeting is enclosed)*
I am, therefore, to request you to reconsider
the case in the light of the above clarification and to accord
your technical approval to and preliminary design note and
rough plans and estimates for the bridge work in question
which are forwarded herewith.

Yours faithfully, -

~~D.S. (R. & B.)~~

les.

D.A.-2 files of plans,
1 file of estimates,
and design note
*copies of this & L. report to
and minutes refd. to.*

Copy forwarded to the Secy. to the G. of I., Ministry of
Transport, Roads Organisation, New Delhi, with ref. to this
G.I.No.9598/36-C(II), dated the 25-8-48.

BOM
5/4/49

16
9/5/49

15/4/49
16/4/49

No. 9551/36-C.

Public Works Department,
Bombay Castle (Bombay No. 1),
13th April 1951.

From

Shri G. S. Padwal, B.Sc., B.E.,
Under Secretary to the Government of Bombay,
Public Works Department.

To

The Consulting Engineer to the Government of India,
Ministry of Transport, Roads Organisation,
Jamnagar House, New Delhi.

Subject:- Development of the West Coast Road
Construction of a bridge across the
Malaprabha river near Khanapur in
mile No. 17/6 and 7 of Marmagaoa-
Belgaum-Poona Road, State Highway.

Sir,

Reference: Your letter No. PL-20(2)/51, dated the
27th January 1951.

2. The proposed bridge across the Malaprabha river
near Khanapur in mile No. 17/6 and 7 is common to Belgaum-
Khanapur-Londa-Goa road as well as to Belgaum-Khanapur-
Bidi-Alnavar-Haliyal Road. In this Government Letter
No. 9598/36-C (II), dated the 25th August 1948 (copy enclosed
for ready reference) this Government had recommended to the
Government of India that the latter road viz. Belgaum-
Khanapur-Bidi-Alnavar-Haliyal Road be included in the
proposed West Coast Road via Bhatkal-Honavar-Kunta-Madangeri-
Yellapur-Haliyal-Belgaum Road. It is presumed that the
Government of India have accepted our recommendation. This
is also clear from the discussion which Honourable Shri K.
Santhanam had with the Honourable Minister, Public Works
Department, Bombay, on the 5th January 1949 (copy of the
minutes of the meeting ~~was~~ enclosed). I am, therefore, to
request you to reconsider the case in the light of the above
clarification and to accord your technical approval to and
preliminary design note and rough plans and estimates for
the bridge work in question which are forwarded herewith.

Yours faithfully,

Under Secretary to the Government of Bombay,
Public Works Department.

D.A.-2 files of plans,
1 file of estimates
and design note,
copies of this G. L.
and minutes referred to.

Copy forwarded to the Secretary to the Government
of India, Ministry of Transport, Roads Organisation, New
Delhi, with reference to this Government Letter No. 9598/36
C (II), dated the 25th August, 1948.

KCJel
13-4-51

A-21 (2045)
17/4

Urgent
No. 9551/36-C

5989 P.W.D.,
B.C. (Bombay No. 1),
1st May 1951.

To

The Consulting Engineer to the Govt. of India,
Ministry of Transport, Roads Organisation,
Lamnagar House, New Delhi

Subject:- (as on p. 57 ante.)

Sir,
I am directed to invite ref. to this ^{p. 57 ante} G.L. No. 9551/36-C,
dated the 13-4-51, on the subject mentioned above and
to request the favour of an early reply thereto.
2. I am further directed to enquire whether this
Govt. files no. 9598/36 ^{Parts I & II} reg: the Development of West Coast
road have been sent with this G.L. ref. to in the above
para and if so, kindly to return them early.

D.A.
nil.

yours faithfully

A.A.S
BOP.
30/5/51

Urgent.
No.9551/36-C.

Public Works Department,
Bombay Castle (Bombay No.1),
1st June 1951.

From

Shri J.M.Dave, B.A.,
Assistant Secretary to the Government of Bombay,
Public Works Department.

To

The Consulting Engineer to the Government of India,
Ministry of Transport, Roads Organisation,
Jammagar House, New Delhi.

Subject:- Development of the West Coast Road.
Construction of a bridge across the
Malaprabha river near Khanapur in
mile No.17/6 and 7 of Marmagao-
Belgaum-Poona Road, State Highway.

Sir,

I am directed to invite reference to this Government Letter No.9551/36-C, dated the 13th April 1951, on the subject mentioned above and to request the favour of an early reply thereto.

2. I am further directed to enquire whether this Government files No.9598/36 Parts I and II regarding the Development of West Coast Road have been sent with this Government Letter referred to in the above paragraph and if so, kindly to return them early.

Yours faithfully,

Assured
2/6/51
D.A:- Nil.

2/6/51
Assistant Secretary to the Government of Bombay,
Public Works Department.

but (47+51)

971

in t
the group has in the

9551/36.

6393

P.W.D.,

No.9551/36-C

B.C. (B.No.1),

10th October 1951.

To

The Consulting Engineer to the G.C.I.(Roads),
Ministry of Transport, Roads Organisation,
Jammagar House, New Delhi.

Sub:(As at p.61)

.....

Sir,

I am directed to invite reference to ^{this} ~~G.L.~~ ^{6.11.}

No.9551/36-C dated the 1.6.1951 on the above subject,
and to request the favour of a very early reply thereto.

Yours faithfully,

D.A.- Nil

J.A.S.

9.10.51.

S. W. (H. L.)
107x

J. K. S. S. S.
10/10

65-95

No. 9551/36-C.

Public Works Department,
Bombay Castle (Bombay No.1),
10th October 1951.

From

Shri J. M. Dave, B.A.,
Assistant Secretary to the Government of Bombay,
Public Works Department.

To

The Consulting Engineer to the Government of India (Roads),
Ministry of Transport, Roads Organisation,
Jammagar House, New Delhi.

Subject:- Development of the West Coast Road -
Construction of a bridge across the
Malaprabha river near Khanapur in
mile No.17/6 and 7 of Marmagosa-
Belgaum-Poona Road, State Highway.

Sir,

I am directed to invite reference to this Government
Letter No. 9551/36-C dated the 1st June 1951 on the above
subject, and to request the favour of a very early reply
thereto.

Yours faithfully,

[Signature]

Assistant Secretary to the Government of Bombay,
Public Works Department.

[Handwritten notes]
2/11/51
10/10/51

ISSUED
[Handwritten signature]

2
VMW.
10/10/51.
[Handwritten signature]
10/10

D.A.-Nil.

Telegram

State

From: Bomworks Bombay

To: Roadind Newdelhi

8-27/10/51

Please ~~exp~~ ^{return} File 9598/36

Parts I and II referred in para 2

of this Govt Letters ^{✓ 11.} No. 9551/36-C dated

~~XXXXXX~~ first June ^{1951.} ~~and tenth October 1951~~

stop ^{Repr. early} ~~reply~~ to Govt Letter same number

fourteenth April. ~~also awaited~~

~~J.A.S.~~

.....

No.9551/36-C

P.W.D.,

B.C. (B. No.1),

1st Nov. ~~October~~ 1951

Copy by post in confirmation, to the
Consulting Engineer to the G.O.I.(Roads), Ministry of
Transport, ~~Tam~~ Nagar House
Shanjahan Road, New Delhi-2. For J.A.S.

For tel. & B.C. 1007/21
27/10/51

Telegram
- Insu
27-10-51.

26-10-51.

State

Telegram

Dated 27th October 1951.

From : Bomworks, Bombay.

To : ROADIND, New Delhi

Please return File 9598/36 Parts I and II referred in paragraph 2 of this Government Letter 9551/36-C dated first June 1951 Stop Request early reply to Government Letter same number fourteenth April.

No.9551/36-C.

Public Works Department,
Bombay Castle (Bombay No.1),
1st November 1951.

Copy, by post, in confirmation to the Consulting Engineer to the Government of India (Roads), Ministry of Transport, Jamnagar House, Shahjahan Road, New Delhi 2.

ML
for Assistant Secretary to the Government
of Bombay, Public Works Department.

Auth
(1-12-51)
6/11

2
VSD

1/11/51

Issued
H. J. A.

Telegram :
" ROADIND."

GOVERNMENT OF INDIA
MINISTRY OF TRANSPORT : ROADS ORGANISATION.

BY REGISTERED POST
AIR MAIL

JAMNAGAR HOUSE,
Shahjahan Road.

No. PL-20(2)51.

New Delhi, ~~thx~~-2, the

From:

Mr. J. G. Gomes,
Under Secretary to the Government of India.

To:

The Secretary to the Government of Bombay,
Public Works Department,
Bombay Castle,
BOMBAY 1.

Subject:- Construction of a bridge over Malaprabha
river on Marmagoa-Belgaum-Poona road.

Sir,

I am directed to refer to your telegram dated the
27th October 1951, and to return herewith, as desired, File
No.9598/36, Parts I and II. *8257*

2. Your letter No.9551/36-C, dated the 13th April
1951, is under consideration and a reply is expected to be
sent to you very shortly.

Yours faithfully,

J. Gomes.
4/11/51

Under Secretary to the Govt. of India.

Encl: Two files.

JNChadha
5/11/51.

69/11

21-11 26:19
C 7/11

P. W. D.
Fus No. 9551/36
Serial No. 95832

C
7-11-52

No. 9551/36-C

To .

*Not issued as the Project has been
read from h. D. I.
vide its letter no. PL-20(2)51
dt. 11-12-1951.*

9551/36 103 73.
P.W.D.,
B.C. (B. No.1),
Nov. 1951.
20 Dec

The U.S. to the G.O.I.,
Ministry of Transport: Roads Organisation,
Jamnagar House, Shahjahan Rd.,
New Delhi-2.

Sub: (as at p. 71 ante)

.....

Sir,

I am directed to refer to your letter No. *P. 71*

PL-20(2)51 dated ~~the~~ the 5.11. 1951 on the above
subject and to request you kindly to send the reply
in the form of a letter
when a further communication may be required..
promised in para 2 thereof, ~~as early as possible.~~

Yours faithfully,

D.A.- Nil

J.A.S.

29.11.51.

shd (as per p. 20) 21/5 71
Done.
11/12/51